

Zoom chassis camera

VK-S274R(NTSC)/VK-S274ER(PAL)

HITACHI
Inspire the Next

- ***Compact 22x Optical Power Zoom Lens***
- ***Privacy Zoom Masking***
- ***Mirror Image Function***
- ***Remote Control Capability through RS-232C***
- ***Internal/External Sync. (AC-Line Pulse Signal)***
- ***RoHS-compliant***



Made in Japan

High-Sensitivity Camera with New Advanced CCD, D.S.S. and 22x Power Zoom

VK-S274R(NTSC)/VK-S274ER(PAL)

The VK-S274R(NTSC)/VK-S274ER(PAL) are compact chassis-type cameras designed for surveillance under very low light conditions. Thanks to the optimized On-Chip Micro Lenses, sensitivity is dramatically improved and the smear level greatly reduced, meaning objects are captured effectively even under poor lighting. The Privacy Zone Masking and Mirror Image functions improve the versatility of the Hitachi video cameras. These models are RoHS-compliant to enhance environmental friendliness.

High-Sensitivity/ Low-Smear CCD

From crime prevention to surveillance, the range for CCTV applications is constantly expanding. This means the demand for high-sensitivity video cameras is now greater than ever. Hitachi's VK-S274R series of high-sensitivity color and monochrome video cameras, VK-S274R/S274ER are developed to satisfy this need. They feature a newly-developed 1/4-inch, 410/470k-pixel CCD. Thanks to its dramatically improved performance, the new VK-S274R camera achieves a sensitivity twice that of conventional cameras. Moreover, the smear level is greatly reduced compared with typical cameras. Images are practically blur-free.

Optimized On-Chip Micro Lenses

The VK-S274R's newly-developed sensor features significantly improved performance to achieve exceptionally high sensitivity. On-chip lens technology mounts a micro lens on each pixel with ultra precision, so that concentrated light falls on sensors, thereby increasing video camera sensitivity.

Sensitivity to Visible Light is More than Doubled

Superior high-sensitivity is the most outstanding property of the new Hitachi video cameras. For instance, the minimum illumination of the VK-S274R is merely 0.06 lx (color, 1/4s), meaning the camera is more than twice as sensitive as conventional cameras. Thanks to the improved structure of unit cells, the degree of light leakage is also drastically reduced to cut smear. These superior properties make the new Hitachi camera an excellent choice for applications in low-light environments.

Privacy Zone Masking Function

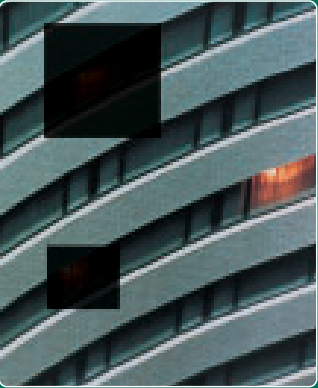





Image from Conventional CameraZone Masked Image from Hitachi's Camera

Mirror Image Function



OriginalReverse

Color Sensitivity



Conventional CameraHitachi's High-Sensitivity Camera

Privacy Zone Masking Function

When there are windows, entrances and other objects within the camera's vision that are not subject to surveillance, they can be masked on the monitor for protection of privacy. This makes the VK-S274R series of video cameras particularly suitable for outdoor surveillance.

Environmentally Friendly

With these new RoHS-compliant models, make your organization environmentally conscious. The VK-S274R(NTSC)/VK-S274ER(PAL) cameras enable you to not only monitor your environment but also help preserve it.

Backlight Compensation

You can control a six-division image area for backlight compensation.

Remote Control through RS-232C

Remote operations are possible via the RS-232C, which allows control of the camera's focus, iris, zoom, shutter speed, etc

Mirror Image Function

The mirror image function enables the reversing of the field of view depending on the camera's position.

Digital Slow Shutter (D.S.S.)

The Digital Slow Shutter allows the camera a long exposure time of 1/2 second*. This translates into a higher sensitivity and minimum illumination of only 0.03 lx*(color, 1/2s). Since more color data is captured and stored by the camera, you can see things not visible with conventional color video cameras.

*Applies to the VK-S274R.

Built-In Optical Power Zoom Lens



The VK-S274R's built-in 22x optical zoom lens is highly reliable. It features auto focus, auto iris and zoom functions. In conjunction with 12x digital zoom, the total zoom ratio is 264x.

A.I. (Artificial Intelligence) Control with D.S.P.

A.I. Auto Iris: Adjusts iris so that video output is kept at a fixed level, even if surrounding illumination changes.



A.I. Auto White Balance: Provides natural color reproduction according to ambient lighting.

B&W Sensitivity



Conventional CameraHitachi's High-Sensitivity Camera

Smear Level



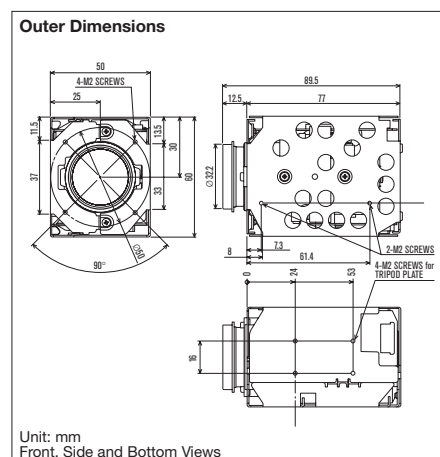
Conventional CameraHitachi's High-Sensitivity Camera

Smear Level Reduced to Lower than Conventional Level

Specifications

	NTSC	PAL
Signal Format:	VK-S274R	VK-S274ER
Scanning System:	2:1 Interlacing	
Horizontal:	15.734kHz	15.625kHz
Vertical:	59.94Hz	50Hz
Image Sensor:	1/4-inch type CCD	
Total Pixels:	811(H) X 508(V); 410k	795(H) X 596(V); 470k
Effective Pixels:	768(H) X 494(V); 380k	752(H) X 582(V); 440k
Lens:	F1.6-F3.8; f=4-88mm; High Durability 22x Zoom Lens, Auto Focus	
Angle of view:	Horizontal 47° (Wide), 2.2° (Tele)	
Min. Focal Distance:	0.01m (Wide), 1.0m (Tele)	
Sensitivity:	NTSC 1lx (1/60s); 0.06lx (1/4s); 0.03lx (1/2s)	PAL 1lx (1/50s); 0.06lx (1/3s); 0.03lx (1/1.5s)
Horizontal Resolution:	NTSC 470 TVL	PAL 460 TVL
Luminance S/N:	More than 50dB	
Signal Processing:	Digital Signal Processor (Hitachi DSP-V)	
Video Output:	Composite: 1.0±0.2Vp-p	
Supplied Voltage:	9-12VDC	
Sync System:	Internal/External	
Camera Functions:	(Control through RS-232C)	
Optical Zoom:	TELE-WIDE (Zoom Speed: 3.9s/6.3s)	
Digital Zoom:	Off/On (up to 12x)	
Video Focus:	Auto/Manual (NEAR-FAR)	
White Balance:	Auto/Manual (Red/Blue Gain Level: UP-DOWN)	
Shutter Speed:	Auto (Seamless Shutter Speed Control): 1/2-1/4-1/4,000s Manual: 1/2-1/30,000s	Auto (Seamless Shutter Speed Control): 1/1.5-1/3-1/4,000s Manual: 1/1.5-1/30,000s
Iris Control:	Auto/ Manual (Manual Iris Level: UP-DOWN), Auto Iris Cont. Level: UP-DOWN)	
Special Effects Control:	Privacy Zone Masking, Mirror, Image Freeze, Mosaic	
Power Requirement:	3.7W (Max.)	
Operating Temperature:	0-60°C (Recommended: 0-40°C)	
Dimensions:	50(W) X 60(H) X 89.5(D)mm	
Weight:	Approx. 225g	

*Design and specifications are subject to change without notice.



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